

# ARGONNE NATIONAL LABORATORY

Decision and Information Sciences Division

## Special Population Planner (SPP) Emergency Planning for People Who Need Special Help

### Opportunity:

With an increase in perceived threats from natural disasters, technological hazards, and terrorist attacks, it is recognized that better emergency planning is needed for special-needs populations. People who are disabled, persons without vehicles for evacuating themselves, and latchkey children deserve comparable attention to the general population. Furthermore, the Americans with Disabilities Act prohibits exclusion of persons from the benefits of government services or programs solely because they are disabled.

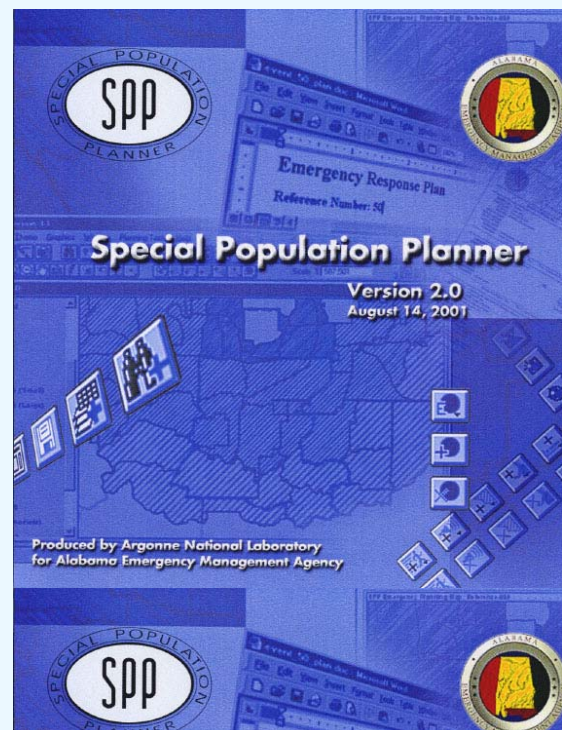
### Approach:

With this need in mind, Argonne National Laboratory developed the Special Population Planner, or the SPP, in cooperation with the Alabama Emergency Management Agency and six Alabama counties. The SPP is the first geographic information system (GIS)-based software tool designed to facilitate emergency planning for special-needs populations.

A custom extension of ArcView, the SPP enables users to easily map the

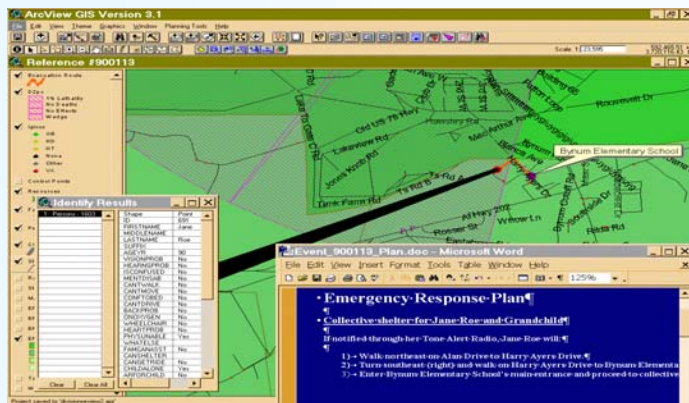
communities, facilities, and households where persons with special-needs reside. It also allows planners to geocode essential data about the special-needs population and to prepare plans for many types of potential emergencies. The SPP is fully compatible with most major operating and software systems. Its open architecture enables:

- ☐ Specialized emergency planning through scenario modeling
- ☐ Integration with 911 data
- ☐ Real-time response implementation



## Features:

The SPP graphically displays data about persons with special needs in households and facilities. This modeling system, which runs on an X86 PC, also allows planners to visualize nearby structures and geographic features, various threat scenarios, and response plans developed on behalf of the special-needs population. Furthermore, the SPP can accommodate additional map layers to allow customization of the display for a variety of hazards and response modes.



## Process:

The SPP process allows planners to look at all aspects of developing and improving emergency response plans for special-needs populations.

- **Develop**
  - Hazard analyses
  - Needs assessments
- **Visualize emergency responses**
  - "War-gaming"
  - Resource loading
- **Track and update**
  - Data on persons with special needs
  - Data on facilities housing persons with special needs
  - Changes in community surroundings
- **Customize**
  - Data reports
  - Map displays
  - Embedded plan formats

## Benefits:

- **GIS capabilities**
  - Facilitate hazard-specific planning using the full range of ArcView tools, plus emergency-planning-specific extensions
  - Allow integration with other geocoded data sets (e.g., 911 data)
  - Permit easy user modification when the available GIS street address data are incomplete or need updating
  - Enable planners to easily match resources to needs
- **Structured data tables and reports**
  - Work easily with data formatted in either Microsoft Access or Oracle
  - Provide intuitive user access to key information about individuals and groups with special needs
  - Include direct-mail update tools
- **Graphical user interface**
  - Makes "invisible" special-needs population visible to the public and decision makers
  - Eases volunteer recruitment
  - Facilitates demonstration of Americans with Disabilities Act compliance

SPECIAL-NEEDS DATA VERIFICATION FORM Instructions on other side of this page

CURRENT INFORMATION ON FILE	YOUR CHANGES
Name <u>[redacted]</u> Age <u>12</u>	Name <u>[redacted]</u> Age <u>13</u>
Address <u>[redacted]</u>	Apt./Lot number <u>[redacted]</u> Street Number <u>[redacted]</u>
City <u>Springville</u> Zip <u>35146</u> County <u>St. Clair</u>	Street name <u>[redacted]</u> City <u>Springville</u> Zip code <u>35146</u> County <u>St. Clair</u>
Mailing address (if different) <u>[redacted]</u>	Mailing address (if different) <u>[redacted]</u>
City <u>[redacted]</u> Zip code <u>[redacted]</u>	City <u>[redacted]</u> Zip code <u>[redacted]</u>
Phone <u>[redacted]</u>	Phone <u>[redacted]</u>
1. The person named above has physical or medical problems and would be unable either to leave the area (evacuate) or to create a shelter environment at home if advised to do so by my county Emergency Management Agency.	
1(a) This person's problems include the following: Wheelchair <u>[redacted]</u> Confined to bed <u>[redacted]</u> Is confused <u>[redacted]</u> Vision problem <u>[redacted]</u> Heart problem <u>[redacted]</u> On oxygen <u>[redacted]</u> Cannot move <u>[redacted]</u> Hearing problem <u>[redacted]</u> Back problems <u>[redacted]</u> Physically unable <u>[redacted]</u> Mentally disabled <u>[redacted]</u> Cannot drive <u>[redacted]</u>	
1(b) What else? <u>[redacted]</u>	
1(c) All the assistance this person needs to leave the area (evacuate) can be provided by myself and/or family members: Yes <u>[redacted]</u> No <u>[redacted]</u>	
1(d) All the assistance this person needs to create a shelter environment at home can be provided by myself and/or family members: Yes <u>[redacted]</u> No <u>[redacted]</u>	
2. In case a car is not available during an emergency, someone (family, neighbor, relative, or friend) can be counted on to help me/my family to leave the area (evacuate): Yes <u>[redacted]</u> No <u>[redacted]</u>	
3(a) There are times when children currently in our home would be alone and needing assistance in an emergency: Yes <u>[redacted]</u> No <u>[redacted]</u>	
3(b) If 3(a) is YES, someone (family, neighbor, relative, or friend) can be counted on to help those children if/when an emergency occurs when we are not at home: Yes <u>[redacted]</u> No <u>[redacted]</u>	

Instructions on other side of this page

(Confidential information has been blacked-out.)

For further information, contact:

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